

Abstract:

This invention relates to an apparatus for molding a mold by pressurizing a foam mixture composed of particles of aggregate, water-soluble binders, and water, and injecting it into a cavity of a heated metal mold.

This invention provides an apparatus which can use a foam mixture effectively, can fill the cavity of the metal mold with enough of a foam mixture, and can shorten the time to harden the foam mixture.

To achieve these effects, the apparatus for molding a mold is comprised of a hollow rectangular-parallelepiped body 12 having a bottom plate 14, the bottom plate 14 having an injection hole 13 to inject the foam mixture, a means 10 for containing the foam mixture having functions as a mixing bath to mix particles of aggregate, water-soluble binders, and water, and as a pressurized vessel to inject the foam mixture into a metal mold, and a means 22 for closing and opening the injection hole 13. The apparatus is further provided with any means or any combination of means for measuring a temperature of the particles of aggregate or the foam mixture, viscosity of the foam mixture, and moisture of the foam mixture. Further, the means for communicating gases from the cavity of the metal mold to the outside of the mold so that the particles of aggregate cannot pass through it is disposed in the metal mold.